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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,040	05/08/2001	Stephen Paul Zimmerman	8072M	2167

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THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER

BECKER, DREW E

ART UNIT PAPER NUMBER

1761

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,040

Applicant(s)

ZIMMERMAN ET AL.

Examiner

Drew E Becker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-30 is/are pending in the application.
- 4a) Of the above claim(s) 24-27 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-23, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

1. The request filed on February 2, 2004 for an RCE based on parent Application No. 09/851,040 is acceptable and an RCE has been established. An action on the RCE follows.

Information Disclosure Statement

2. The information disclosure statement received October 3, 2001 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the three "sample" references do not include a date.

Specification

3. The disclosure is objected to because of the following informalities: page 1 includes an attorney docket number, which should be removed when referring to an application.

Election/Restrictions

4. This application contains claims 24-27 and 30 drawn to an invention nonelected without traverse in Paper No. 9. A complete reply to the rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3, 5-23, and 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Claims 1-3, 5-23, and 28-29 recite "snack pieces" as well as "a snack piece". It is not clear whether they are the same, or different, snack pieces.
8. Claim 5 is dependent upon cancelled claim 4. It is not clear which claim it should depend from.
9. Claim 6 recites the limitation "said body". There is insufficient antecedent basis for this limitation in the claim.
10. Claim 12 recites that the snack pieces are "consistent in size and shape". It is not clear what level, or degree, of variation in size and shape would be considered to be "consistent".

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 1-3, 8-15, 18-23, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc [Pat. No. 4,844,919] in view of Applicants Admitted Prior Art (page 8, lines 19-32 of the specification).

Szwerc teaches snack pieces comprising consistent concave-curved pieces with random surface features (Figures 1-3) and a thickness of 3mm (column 4, line 64).

Szwerc does not recite a volumetric bulk density of $8-80 \times 10^{-5} \text{ g/mm}^3$, nesting, a package, a lipid content of 18-40%, a package bulk density of $10-35 \times 10^{-5} \text{ g/mm}^3$, a snack piece density of 1 to $17 \times 10^{-4} \text{ g/mm}^3$, or a modulus of elasticity of 0.1-6 g/mm^2 .

Applicants' Admitted Prior Art [AAPA] teaches non-planar snack pieces in a nested arrangement with a volumetric bulk density of 26 to $59 \times 10^{-5} \text{ g/mm}^3$, a package volumetric bulk density of 13 to $20 \times 10^{-5} \text{ g/mm}^3$, and chips which have similar shape and size, and a fat content of 38% (page 8, lines 19-32), and the snack pieces would have inherently overlapped when packaged and possessed some degree of surface randomness. It would have been obvious to one of ordinary skill in the art to incorporate the snack piece features of AAPA into the invention of Szwerc since both are directed to snack pieces, since these densities and properties were well known in the snack piece art as shown by AAPA, and since more efficient packaging of the snack pieces of Szwerc, in view of AAPA, would have provided many benefits such as reduced shipping costs, reduced storage costs, and reduced packaging costs. It would have been obvious to one of ordinary skill in the art to use a snack piece density of 1 to $17 \times 10^{-4} \text{ g/mm}^3$ in the product of Szwerc, in view of AAPA, since this would have been done during the course of normal experimentation and optimization, since AAPA already included a

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volumetric bulk density of 26 to 59×10^{-5} g/mm³ and a package volumetric bulk density of 13 to 20×10^{-5} g/mm³ (page 8, lines 19-32), and since a dense snack piece would reduce the shipping and storage cost per package. It would have been obvious to one of ordinary skill in the art to use a modulus of elasticity of 0.1 - 6 g/mm² in the product of Szwerc, in view of AAPA, since this would have been done during the course of normal experimentation and optimization and since a more resilient chip would be less likely to break during shipping and transport.

13. Claims 1, 3, 8-13, 15, 18-19, 21-22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc in view of Carey et al [Pat. No. 5,747,092].

Szwerc teaches snack pieces comprising consistent concave-curved pieces with random surface features (Figures 1-3) and a thickness of 3mm (column 4, line 64).

Szwerc does not recite a volumetric bulk density of 8 - 80×10^{-5} g/mm³, a package, a lipid content of 18-40%, a snack piece density of 1 to 17×10^{-4} g/mm³, or a modulus of elasticity of 0.1 - 6 g/mm². Carey et al teach overlapping non-planar snack pieces comprising chips with random surface features (Figure 1), a bulk density of 5 - 9.5 lb/ft³ or 8 to 15.2×10^{-5} g/mm³ (column 20, line 39), a fat content of 18.5% (column 24, line 63), consistent size and shape (column 18, lines 5-39), packaging (column 20, line 37), a minimum thickness of .03125" (column 18, line 14), a maximum thickness at least 2.75 times greater than the minimum thickness (column 5, line 59) which results in a maximum thickness of at least 2.2 mm. The snack pieces would have inherently overlapped when packaged. Carey et al teach the above mentioned components. Carey et al do not recite a snack piece density of 1 to 17×10^{-4} g/mm³ or a modulus of elasticity

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of $0.1\text{-}6\text{ g/mm}^2$. It would have been obvious to one of ordinary skill in the art to incorporate the snack piece features of Carey et al into the invention of Szwerc since both are directed to snack pieces, since these densities and properties were well known in the snack piece art as shown by Carey et al, and since more efficient packaging of the snack pieces of Szwerc, in view of Carey et al, would have provided many benefits such as reduced shipping costs, reduced storage costs, and reduced packaging costs. It would have been obvious to one of ordinary skill in the art to use a snack piece density of $1\text{ to }17 \times 10^{-4}\text{ g/mm}^3$ in the product of Szwerc, in view of Carey et al, since this would have been done during the course of normal experimentation and optimization, since Carey et al already included a bulk density of $5\text{-}9.5\text{ lb/ft}^3$ or $8\text{ to }15.2 \times 10^{-5}\text{ g/mm}^3$ (column 20, line 39), and since a dense snack piece would reduce the shipping and storage cost per package. It would have been obvious to one of ordinary skill in the art to use a modulus of elasticity of $0.1\text{-}6\text{ g/mm}^2$ in the product of Szwerc, in view of Carey et al, since this would have been done during the course of normal experimentation and optimization and since a more resilient chip would be less likely to break during shipping and storage.

14. Claims 5-7 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc, in view of AAPA, as applied above, and further in view of Fink et al [Pat. No. 6,129,939].

Szwerc and AAPA teach the above mentioned components. Szwerc and AAPA do not recite a bowl shape, sphere-cap, or a radius of curvature of $5\text{-}500\text{ mm}$. Fink et al teach a snack piece comprising a bowl shape with a sphere cap (column 2, line 24). It would

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have been obvious to one of ordinary skill in the art to incorporate the bowl shape with a sphere-cap of Fink et al into the product of Szwerc, in view of AAPA, since all are directed to snack pieces, since Szwerc already included curved chips (Figures 1-3), and since chips having bowl shapes and sphere caps were commonly known as shown by Fink et al. Although not specifically recited, it would have been obvious to one of ordinary skill in the art to use a radius of curvature of 5-500 mm for the product of Szwerc since Szwerc already taught a degree of curvature of 10-45° (column 5, line 8), since this would have been done during the course of normal experimentation and optimization, and since this size of curvature was commonly used for snack pieces as evidenced by nearly any supermarket.

15. Claims 5-7 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc, in view of Carey et al, as applied above, and further in view of Fink et al. Szwerc and Carey et al teach the above mentioned components. Szwerc and Carey et al do not recite a bowl shape with a sphere-cap and a radius of curvature of 5-500 mm. Fink et al teach a snack piece comprising a bowl shape with a sphere cap (column 2, line 24). It would have been obvious to one of ordinary skill in the art to incorporate the bowl shape with a sphere-cap of Fink et al into the product of Szwerc, in view of Carey et al, since all are directed to snack pieces, since Szwerc already included a concave surface (Figures 1-3), and since chips having a bowl-shaped design with a sphere cap were commonly known as shown by Fink et al. Although not specifically recited, it would have been obvious to one of ordinary skill in the art to use a radius of curvature of 5-500 mm for the product of Szwerc, in view of Carey et al and Fink et al, since Szwerc

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already taught a degree of curvature of 10-45° (column 5, line 8), since this would have been done during the course of normal experimentation and optimization, and since this size of curvature was commonly used for chips as evidenced by nearly any supermarket.

16. Claims 2, 14, 20, 23, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc, in view of Carey et al, as applied above, and further in view of AAPA.

Szwerc and Carey et al teach the above mentioned components. Szwerc and Carey et al do not recite nesting and a package bulk density of $10\text{-}35 \times 10^{-5} \text{ g/mm}^3$. AAPA teach a snack piece being packaged in nested configuration and a package bulk density of $10\text{-}35 \times 10^{-5} \text{ g/mm}^3$ (page 8, lines 19-32 of the specification). It would have been obvious to one of ordinary skill in the art to incorporate the packaging characteristics of AAPA into the invention of Szwerc, in view of Carey et al, since all are directed to snack pieces, since Carey et al already included packaging (column 20, line 37), and since the packaging characteristics of AAPA would have provided improved shipping and transport by reducing costs due to the more efficient packing.

Response to Arguments

17. Applicant's arguments with respect to claims 1-3, 5-23, and 28-29 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that AAPA and Carey et al cannot be combined because one included frying and the other included baking. However, AAPA is only relied upon to

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teach nesting and package bulk density (paragraph 16 above). Neither of these two limitations are in any way affected by the manner of making the snack piece (ie frying vs baking).

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hamann [Des. 268,839] teaches a curved snack piece with random surface features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E Becker whose telephone number is 571-272-1396. The examiner can normally be reached on Mon.-Thur. 8am-5pm and every other Fri. 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Drew E Becker
Primary Examiner
Art Unit 1761

3-19-04